

**THE DEVELOPMENT OF A DECENTRALIZED
EMERGENCY MEDICAL TECHNICIAN
RE-CERTIFICATION PROGRAM**

BY: Wolf Knabe
Los Angeles City Fire Department
Los Angeles, California

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ABSTRACT

The Los Angeles City Fire Department (LAFD) needed an Emergency Medical Technician Re-certification Program that was better suited for the changing economic times and for greater resource availability. To address these concerns, a decentralized program was encouraged.

The problem that the Los Angeles City Fire Department encountered was the lack of an Emergency Medical Technician Re-certification Program that was cost effective, resource practical, and member friendly.

The purpose of this project was to develop a decentralized EMT Re-certification Program that addressed the above concerns and provided such a program within the guidelines of all applicable laws and regulations.

This research employed both action research and descriptive research methods with the former being the primary method utilized. The research methods provided insight into the current LAFD EMT re-certification program and identified ways in which improvement could be accomplished through the development of a decentralized program.

The primary procedure utilized was that of literature review. In addition a survey was conducted to ascertain the opinions of Department members. Programs were compared and contrasted using specific measurable objectives and developing an action plan to meet those objectives. Results were utilized to provide an implementation plan. Results will be available for evaluation once the program is in place and the first testing cycle is complete.

The recommendations from the research included implementing the plan as soon as practical and monitoring the program to ascertain its affect on the Department's EMT program.

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INTRODUCTION

The current Emergency Medical Technician (EMT) Re-certification Program of the Los Angeles City Fire Department (LAFD) provides for a good educational environment but is a resource depleting process. It is currently conducted in a centralized location which requires members and apparatus to travel great distances to attend the required training. In addition, Department members complain that EMT training is long and much of the material is not practical for day to day operations as EMTs. The problem that faces the LAFD is the need for a cost effective, resource friendly method of providing EMT re-certification. In an effort to address the problems of the current EMT re-certification process, the Department investigated alternative means of providing this training and determined that a decentralized method would be most practical.

The purpose of this project was to develop a decentralized EMT re-certification program that would address the needs of the Department and its members. Descriptive research was used to present the current status of providing EMT Re-certification training and action research was used to develop a decentralized method of providing this training. The above mentioned research methods were used to answer the following questions:

- What are the requirements for an EMT re-certification program (e.g. federal, state, local, etc.)?
- What is the trend within local fire departments regarding EMT training?
- What are the problems associated with a Decentralized EMT re-certification program?

- What are the opinions of current members of the LAFD regarding current and future EMT re-certification programs?
- How will the program be implemented?

BACKGROUND AND SIGNIFICANCE

The City of Los Angeles is comprised of approximately 435 square miles. The population is over three million. The LAFD has over 3000 personnel to provide fire and emergency medical services protection for this large metropolis. These personnel are assigned to three Divisions, 16 Battalions, 102 fire stations, and miscellaneous special administrative assignments.

The majority of personnel are assigned to the Bureau of Emergency Services which provides all fire suppression and emergency medical services. The citizens of Los Angeles receive both Advanced Life Support (ALS) as well as Basic Life Support (BLS). The ALS is provided by paramedic certified firefighters and paramedics and the BLS is provided by EMT firefighters.

To maintain this level of service, all firefighters must maintain their EMT certification. This was accomplished by attending a 32-hour refresher course (8-hours more than the state requirement) every two years. Not only did the refresher course exceed state requirements in hours, it exceeded state requirements in testing, by giving a test every two years as opposed to the testing every four years that is required. This refresher course was conducted at a central location in the downtown area of the city. The LAFD has been conducting EMT training for its members this way since 1989. In 1996, the Department realized that

it could no longer afford the luxury of providing more training than is required. It opted to cut back the training to the 24-hour state mandated amount. Unfortunately cutting back the hours of training still required members to come to a central location for training and resource depletion was still prevalent.

The benefits to the current centralized program are the classroom atmosphere and the small number of instructors. The drawbacks are the travel time to a central location, resource depletion, and material presented in training is not necessarily practical.

The impact of the current centralized EMT program on the Department is high costs due to the wear and tear on heavy apparatus, companies being out of service long periods of time to meet the eight hour class and up to two hour travel time, and reduced morale.

To alleviate these problems, the Department looked into alternate methods of providing for EMT re-certification. The main consideration was to provide a method of decentralization and at the same time provide for quality instruction.

Many options were surveyed. These options included receiving training from an outside agencies, not requiring EMT certification, and providing training in the field.

The development of a new decentralized EMT re-certification program will have a tremendous impact on the LAFD and will be a significant change in LAFD EMT re-certification training. However, to effectively and efficiently implement the change will require the use of an appropriate change model. The Strategic Management of Change course brought to light a comprehensive and practical

model to follow. This will ensure that the implementation of the new program will be conducted with all major considerations and problems addressed.

LITERATURE REVIEW

The EMT program of the LAFD is controlled by the State EMS Authority, and the Local EMS Agency, which is the County of Los Angeles, Department of Health Services. The California Code of Regulations, Title 22; and the Pre-hospital Care Manual, Department of Health Services, County of Los Angeles provides the Department with its written guidelines. Currently, there are no national requirements or standards, however, a national registry examination for EMTs is being considered.

An EMT-I is a person who successfully completes an approved EMT-I course which meets the requirements of Title 22, passes all the tests, and is certified by the EMT-I certifying authority.

In order for a member to be trained as an EMT, they must attend an approved EMT training program. These programs are limited to accredited universities and colleges, school districts and private post-secondary schools, medical training units of the Armed Forces, licensed general acute care hospitals that hold special permits to operate as basic or comprehensive emergency medical service and provide continuing education to other health care professionals, agencies of government including public safety agencies, and local EMS agencies.

Eligible EMT training programs may submit a written request for EMT-I program approval to the EMT-I approving authority, in this case the County of Los Angeles, DHS. The program must consist of not less than 110 hours of training in which 100 hours must be classroom and laboratory instruction and ten hours of supervised clinical experience. There must be periodic examinations, as well as a final written examination and skills competency examination. The program must also include a refresher course for re-certification. The program must have a challenge examination available for EMT's from other jurisdictions.

Once an EMT is certified, in order to maintain this certification, the EMT must either participate in continuing education (CE) courses or complete a refresher course.

CE shall consist of a minimum of 24 hours of classroom and laboratory instruction, not including re-certification testing. The refresher course shall consist of the same 24 hour requirement and shall be offered not less than once a year.

To be eligible for re-certification, a member must possess a current EMT-I certificate and successfully complete a refresher course or attend the required minimum CE. EMT-I certificates are valid for two years, and every fourth year a member must pass a competency-based written and skills examination.

The current LAFD EMT re-certification program entails members attending three 8-hour training sessions at a central location. This training requires that members attend training on-duty. To accomplish this task, companies (up to seven) must be taken out of service to attend such training. Up until approximately 1992,

there were funds available in the budget to hire overtime to fill behind members attending EMT training. Due to budget cuts, these funds were eliminated.

The discussion over centralized training versus decentralized training has been a hot topic in the fire service. Some Departments have an In-Service Training Academy in which all mandated training is conducted at a central location at one time and others provide a decentralized training which allows for members to receive training at the field level. Still others have regional training which closely resembles centralized training, but provides several locations for this training.

The San Diego Fire Department (SDFD) trains its members utilizing a centralized program which entails members coming to a central training center for several hours, several times a year and completing all their mandated training at once. This gives the company the rest of the year to conduct other duties.

The Los Angeles County Fire Department (LACOFD) uses a regional model in which there are several locations members can receive the same training. This is basically a centralized training method with more locations. The department has several regional training areas in which training is conducted.

Members go to these locations and receive the mandated training. In the past, the LACOFD provided EMT Re-certification training in a decentralized manner, however, they were met with certain problems. The problems included instructor quality/consistency, scheduling problems, and overall lack of accountability.

The Ventura County Fire Department (VCOFD) conducts its EMT training in a central location utilizing a lecture/video model. Incorporated into their program is

tape review and defibrillator training (K. Mashburn, personal interview, September 7, 1997).

The Long Beach Fire Department (LBFD) conducts its EMT training using a video based system in which members receive CE at the station. This CE involves paramedics utilizing video tapes to present required information and practical exercises. The LBFD anticipates problems with their videographer and will go to a centralized training program until a new videographer can be found.

To determine the effect of the current and future EMT program, and the opinions thereof, a survey of LAFD Department members was conducted. The surveyed population included 150 surveys being sent out and approximately 100 being returned. The members were current EMTs involved in the re-certification process and were chosen at random. Current EMTs undergoing the re-certification process were randomly selected because they were the best subjects for obtaining information on the efficiency and the desirability of the current program (K. Ord, personal interview, September 20, 1997).

In addition to receiving written information from both the LBFD and the VCOFD, I had the honor of discussing the programs with members of each department's training staff. These discussions added to my research and allowed me to gain first hand experience as to how other departments operated their EMT programs. It also enabled me to ask questions as to how we could prevent certain problems from occurring that had been encountered by their departments. In the case of the LACOFD, it allowed me to address specific items and ensure that they were taken care of prior to implementing our program. I was able to access vital

information and apply this information to our program and hopefully bring about its successful implementation.

PROCEDURES

The literature review comprised a large portion of this research project. It was imperative that other local fire departments were viewed in regards to their EMT re-certification programs. In addition, problems with current decentralized programs or their facsimiles needed to be addressed. The LAFD's current EMT re-certification program needed to be discussed and the need to decentralize established.

The literature review entailed researching the current state and local requirements within the State of California, and the County of Los Angeles. Once this information had been determined, it was critical to investigate other local agencies and how they handled their programs. Lastly, the problems associated with current decentralized EMT re-certification programs were considered and addressed.

Once the above necessary information was obtained and assimilated, the next step was to survey the Department members that require such training and have them respond to questions having to do with current and future EMT re-certification training.

Members were chosen based on two criteria. The first criteria was to be currently certified as an EMT and the second criteria was to have completed EMT

re-certification training within the last month or be currently attending the training. The time frame of one month was used so that department members would have just undergone the training process and could better relate their experiences.

Once members met the above criteria, a list was developed and 100 members were selected at random. Fifty members responded to the survey (Appendix A).

The limitations of the survey was obviously the number of surveys that were returned. It would have been of benefit to have more surveys returned, however, complacency and procrastination are enemies of research. The surveys did indicate the problems with the current system and what members wanted to see in future programs.

Definition of Terms

EMT - Emergency Medical Technician

CE - Continuing Education

DHS - Department of Health Services

CCR - California Code of Regulations

Research Methodology

The desired outcome of this project was to develop a decentralized EMT re-certification program that addresses all the problems and needs of the LAFD and its members. The research was descriptive in that a review of the current LAFD EMT re-certification program was conducted to ascertain the problems with it and

how to alleviate those problems through a new and innovative program. Data was gathered from the LAFD program as well as other local fire departments

ASSUMPTIONS AND LIMITATIONS

Although information regarding training could be accessed from fire departments nationally, much of the needed comparisons and lessons learned regarding EMT training needed to be derived from local Southern California departments. This is because of the state and local agencies that govern the EMT programs. To compare fire departments in other states would be counter productive because they have different parameters and guidelines they must follow. However, training methods and ideologies from these departments can be considered and adapted. The results of this project will not be evident until the plan is officially approved and implemented. After the program has been up and running and the first testing cycle is complete, the program can be revisited and a determination of outcome can be made.

RESULTS

The results of the project included the development of a decentralized EMT re-certification program. In addition, the problems associated with such a program were addressed and incorporated into the program. The implementation methods were developed. Unfortunately, LAFD policy does not allow me to provide a copy of our proposed policy as an appendix until it is approved. The answers to the research questions were as follows:

Research question #1

There are currently no federal guidelines regarding local EMT programs, however, a national registry is being considered. The State and local laws and guidelines regarding an EMT re-certification program are spelled out exactly in the CAC and the Pre-hospital care manual. To re-certify, a member must have a current EMT certification and attend either an EMT refresher course or 24 hours of continuing education every two years, on the fourth year a member must also pass a comprehensive written and skills test.

Research Question #2

The trend in local fire departments regarding EMT re-certification training ranges from video based training to a centralized refresher training. The size of the department had a definite impact as to which method of EMT re-certification was used. Smaller departments were able to use video-based training because of the

small number of stations and the closed circuit electronic equipment. The LA County Fire Department utilized a station based method of continuing education in which paramedics provided the CE for EMTs. However, they ran into problems and are in the process of utilizing a regional based training method. This method encompasses members attending various types of training at one of four regional centers. They attend training in 8-hour increments until all mandated training, including EMT training, is completed.

Research Question #3

The problems with a decentralized EMT re-certification program were seen best in the LACOFD EMT re-certification program. They are as follows:

- Problems arise in scheduling training in the field because programs that require ongoing or concurrent training compete with scheduled EMT training.
- Problems with lack of overall accountability
- Problems with lack of instructor consistency
- Lack of classroom environment
- Train the trainer programs are an ineffective means of qualifying instructors to teach a certain topic.
- Problems with span of control
- No system of monitoring the program for accuracy and consistency

The above mentioned problems need to be addressed and solved if a decentralized method of instruction is to be considered.

Research Question #4

The opinions of our Department regarding EMT training varies. The most prevalent complaints are that the training is not practical and that members must travel too far to receive the training.

Many members (80%) feel that current EMT re-certification training is not practical enough and does not reflect what occurs in the field. Members stated that training seemed to be given just to meet the mandate and had nothing to do with day to day field operations.

Members also felt that driving to a central location wasted valuable training time. They expressed their concern that up to 2 hours per day was spent on driving time going to and from the training center.

The main positive comment regarding current training was that all the EMT re-certification training was taken care of in three 8-hours sessions and they did not have to worry about the training for two more years.

Overall, members were not satisfied with the current method of EMT re-certification and wanted a more practical and decentralized method.

Research Question #5

The decentralized program will be implemented in phases. The first phase will include giving all members of the Department 24 hours of EMT training by May, 1998. This will start the Department on a new cycle and enable all Department members to take the written certification examination in the year 2000.

The next phase of implementation will be the decentralization of the EMT instructors. They will each be assigned a division to instruct and one will be assigned development/documentation. In addition, one captain from each battalion will be designated as the Battalion EMT Coordinator who will have the responsibility of keeping track of EMT training and for record keeping within that specific battalion.

The last phase will entail providing EMT training in 2-hour increments at the station level. Concerned officers will be responsible for ensuring members under their command receive the required training. Instructors will have overall responsibility for tracking and recording CE received.

DISCUSSION

Published literature in the area of EMT re-certification was limited. Although local and state regulations existed, many departments did not have an actual written policy on the EMT program. Many used the local and state guidelines as their policy and the program was established via these publications.

The departments that I was able to access information from or talk to individuals about were very helpful. Due to the variety of training methods each department did things just a little bit differently. The common ground for these departments was that they had to adhere to local and state regulations. However,

the way in which they met these regulations differed tremendously. There were not necessarily any right or wrong ways of delivering EMT re-certification training, there were just alternate ways. These alternate ways were determined by a department's size, location, and budget.

The results of this research seemed to indicate to me that a decentralized program would be the best for the LAFD. This is because it meets the concerns of the members, the budget constraints of the Department, and the applicable laws and regulations.

The members will receive practical training that can be used in the field and this training will be company based. This will allow for members that work together to learn together and apply these learned concepts in their every day activities. Travel time will be reduced which will allow for more training time. Costs will be reduced because of less wear and tear on the apparatus. Last but not least, all local and state guidelines and regulations pertaining to EMT re-certification training will be adhered to.

By adopting a decentralized EMT re-certification program, the LAFD will have a more practical program that members will like. The program will give Division and Battalion Commanders more input into training and scheduling. The citizens will benefit because companies will not be out of service for such long periods of time therefore emergency response times will be reduced.

RECOMMENDATIONS

The LAFD was in a dilemma regarding its EMT re-certification program. The program was meeting its numerical and legal goals but not in an efficient and effective way.

To address the concerns and needs of the Department and its members a new EMT re-certification program needs to be implemented. Due to the size of the LAFD and the logistics involved, a decentralized program is best suited for the Department. This is supported by the member survey, the costs involved, the accessibility of a central training facility, and the time allotted for training.

To implement such a program there are various concerns that need to be addressed and overcome. These concerns became evident while comparing other department's EMT programs. To overcome the same problems as other departments, the LAFD must address the following issues:

- Accountability
- Instructor quality and consistency
- Classroom environment

If these considerations are addressed, the LAFD will have a successful EMT re-certification program that will be cost effective and practical. In addition, it will be received in a positive manner by department members.

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EMT SURVEY

The following survey is being conducted to determine the opinions of Department members in regards to current and future EMT re-certification procedures. Please answer the questions using the following scale. Circle/fill-in the appropriate answer and remember this is anonymous. Comments are encouraged.

1- strongly agree 2- agree 3- disagree 4- strongly disagree

How satisfied are you with the current method of EMT re-certification?

2 3 4

2. If you are dissatisfied with the current program, what are the reasons?

length
content
travel
instructors
environ
other

3. If you are satisfied with the current program, what are the reasons?

length
content
travel
instructors
environ
other

4. Would you be willing to conduct EMT training in the field?

1 2 3 4

5. When did you attend EMT re-certification training?